LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Com. DEGREE EXAMINATION – **HONOURS**

SIXTH SEMESTER – **APRIL 2023**

UBH 6502 – ADVANCED FINANCIAL MANAGEMENT

Date: 02-05-2023 Dept. No. Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

SECTION A

Answer the questions **(1*50=50 marks)**

(Spilt up of the marks is given along with each question)

QN.NO.1

(a) Selorne Co is one of the biggest removal companies in Pauland, offering home and business removals. It has a number of long-term contracts with large businesses, although it has not won any new major contracts in the last two years.

Selorne Co is listed on Pauland's stock market for smaller companies. Selorne Co is financed by a mixture of equity and short and long-term debt, but its gearing level is below the average for its sector. Selorne Co has four executive directors, who each own 20% of the company's share capital, with the other 20% owned by external shareholders. Selorne Co has paid a constant dividend since it has been listed and its share price has risen slightly over the last three years.

Selorne Co is based in a number of the large cities and towns in Pauland and owns the majority of the sites where it is located. Many of its employees have worked for the company for a long time. Drivers of the lorries used by Selorne Co are required to have a special, heavy vehicles licence. Salary levels at Selorne Co are relatively high compared with other companies in the sector.

Chawon Co

Selorne Co is currently considering making a bid for Chawon Co, an unlisted company specialising in distribution and delivery services. Chawon Co is owned 100% by its founder, Chris Chawon. Chawon Co has built up a portfolio of small contracts over time. It has made unsuccessful bids for two larger contracts over the last 12 months, the bids being rejected primarily because Chawon Co was not felt to be big enough to be able to guarantee the level of service required.

Chawon Co is based in many of the same cities and towns where Selorne Co is located, although Chawon's premises are all rented. The drivers of Chawon's vehicles do not require a heavy vehicles licence. Chawon Co has a few long-serving employees who are mostly centre managers. Most of its drivers and staff, however, stay at Chawon Co for only a short time. Salary levels are low, although Chawon Co pays high levels of overtime and high bonuses if target profit levels are achieved. Chawon Co is highly geared, leading to recent media speculation about its financial viability.

Terms of bid for Chawon Co

In initial discussions about the acquisition, Chris Chawon indicated that he would prefer the consideration to be a share-for-share exchange, the terms being one Chawon Co share for five Selorne Co shares.

Chawon Co has 2 million $1 shares in issue, and Selorne Co has 50 million $0.50 shares in issue. Each Selorne Co share is currently trading at $6.50, which is a multiple of 8 of its free cash flow to equity. The multiple of 8 can be assumed to remain unchanged if the acquisition takes place. Chawon Co's free cash flow to equity is currently estimated at $7 million, with an expected annual growth rate of 3%, and it is expected to generate a return on equity of 15%. Chris

Chawon expects that the total free cash flows to equity of the combined company will increase by $5 million due to synergy benefits. He believes that Selorne Co will be able to win more contracts because it is larger and because it will be diversifying the services which it offers. He also believes that significant operational synergies can be achieved, pointing out the time Selorne Co drivers spend idle during the winter months when removal activity is traditionally lower. Chris Chawon believes that he can achieve the synergies if he is given management responsibility for the operational reorganisation, including dealing with the staff employment and retention issues. Chris Chawon thinks that synergies could also be achieved in central administration and in premises costs.

The chief executive and the finance director of Selorne Co are in favour of bidding for Chawon Co. However, one of the other executive directors is opposed to the bid. He is sceptical about the level of synergies which can be achieved and does not want Chris Chawon to be brought into the management of Selorne Co. He suggests that if the bid is to go ahead, it should be a cash offer rather than a share exchange. Selorne Co's chief executive has responded that Chris Chawon is likely to ask for a higher equivalent price if the purchase is for cash.

Financing the bid for Chawon Co

Selorne Co's finance director has pointed out that Selorne Co will need additional funding if Chawon Co is purchased for cash. He has suggested that there may be a number of possible sources of finance:

– A rights issue
– A fixed rate, long-term, bank loan – A three-year, unsecured, mezzanine loan facility
– Convertible debt, with conversion rights being exercisable in five years' time

Required:

(a) Estimate the equity value of the combined company and the expected additional value arising from the combination of Selorne Co and Chawon Co. **(6 marks)**

(b) (ii) Estimate the share of the gain from the combination created for Chris Chawon and the share of the gain created for Selorne Co's shareholders and comment on your results. **(6 marks)**

(c) Evaluate how reliable the estimates of the synergies for the combined company are likely to be and discuss the factors which may prevent the forecast synergies from being achieved. **(7 marks)**

(d) Discuss the factors which Selorne Co's board will consider when determining which source or sources of finance are chosen to finance a possible cash bid for the share capital of Chawon Co**.** **(6 marks)**

(**b**). A new client has approached you for advice on a potential acquisition. Kerrin Co is a consumer electronics manufacturer and retailer. The company obtained a listing eight years ago with the founders retaining a 20% stake in the business. Whilst Kerrin Co had previously experienced rapid growth in earnings before tax, problems arose soon after the listing as competition intensified. Although the company remains profitable, annual growth has declined significantly and is currently 3%.

The board is concerned by the lack of future growth opportunities. The current share price reflects these concerns, trading well below the offer price of eight years ago. In response, the directors have decided to invest in a market development strategy for future growth, utilising significant cash reserves to acquire companies in other areas of the country where competition is less intense. The board has identified a potential target, Danton Co.

Danton Co

Danton Co is a privately owned consumer electronics company, established ten years ago. Significant unrelieved losses were incurred in the early years of development although the company is now profitable and achieving growth in earnings before tax of 6% per year. However, cash reserves are low. Access to capital has acted as a severe constraint on Danton Co's reinvestment potential throughout this period. The founders and their families own 60% of the shares with the balance held by a venture capitalist organisation, which acquired its equity stake around six years ago.

Acquisition information

Kerrin Co's board is keen to ensure that Danton Co's founders remain as directors after the acquisition and the company has sufficient cash reserves to purchase Danton Co outright.

Early discussions between the directors of both companies suggest Danton Co's shareholders would approve a cash offer of $13.10 per share. As an alternative, the board is considering a share-for-share exchange to fund the acquisition in order to preserve cash for future acquisitions and dividend payments. Recent mergers have attracted an acquisition premium of around 25%–30% and Danton Co's directors indicated their shareholders would be expecting a premium towards the higher end of this scale for a share-for-share offer. Kerrin Co has therefore asked you to design a share-for-share offer scheme which will allow for a 30% acquisition premium.

You have been provided with extracts from the latest financial statements for both companies.

Extracts from the most recent financial statements

	Kerrin Co	**Danton Co**
	$m	$m
Operating profit	448.6	201.8
Earnings before tax	381.9	116.3

Additional financial information

The book value of Kerrin Co's $0.50 ordinary shares is $375m. These shares are currently trading at $5.28 and the finance director expects the price earnings (PE) ratio to increase by 10% if the acquisition proceeds.
Danton Co upgraded its main manufacturing facility during the previous year and expects to make annual pre-tax cost savings of $2.5m from the start of the current financial year. The book value of Danton Co's $0.25 ordinary shares is $35m. Based on an analysis of companies of a comparable size and cost structure, it is estimated that Danton Co's PE ratio is 20% higher than Kerrin Co's current PE ratio.
Kerrin Co's chief executive officer estimates annual pre-tax revenue and cost synergies of $15.2m to arise as a result of the acquisition. In addition, the finance director anticipates annual pre-tax financial synergies of $5.3m although she insists this is a cautious estimate after reading an article on recent merger and acquisition activity where post-acquisition synergies have either been overestimated or failed to materialise.
The rate of corporation tax relevant to both companies is 20%.

Required:

(a) Discuss possible sources of financial synergy arising from Kerrin Co's acquisition of Danton Co and comment on the finance director's concern that synergy is often overestimated, including any steps which could be taken by Kerrin Co's board to address this problem. **(10 marks)**

(b) Advise the directors on a suitable share-for-share exchange offer which meets the criteria specified by Danton Co's shareholders and calculate the effect of the cash and share-for-share offers on the post-acquisition wealth of both Kerrin Co's and Danton Co's shareholders. **(15 marks)**

SECTION -B

Answer all the questions **(2x25=50 marks)**

QN.NO:2

Kurshi co is a large multinational company with a number of international subsidiary companies. A centralised treasury department manages Kurshi co and its subsidiaries' borrowing requirements, cash surplus investment and financial risk management. Financial risk is normally managed using conventional derivative products such as forwards, futures, options and swaps.

Assume it is 1 December 20X4 today and Kurshi co is expecting to borrow $18,000,000 on 1 February 20X5 for a period of seven months. It can either borrow the funds at a variable rate of SOFR plus 40 basis points or a fixed rate of 5.5%. SOFR is currently 3.8% but Kurshi co feels that this could increase or decrease by 0.5% over the coming months due to increasing uncertainty in the markets.

The treasury department is considering whether or not to hedge the $18,000,000, using either exchange-traded March options or over-the-counter swaps offered by Rozu Bank.

The following information and quotes for $ March options are provided from an appropriate exchange. The options are based on three-month $ futures, $1,000,000 contract size and option premiums are in annual %.

March calls	Strike price	March puts
0.882	95.50	0.662
0.648	96.00	0.902

Option prices are quoted in basis points at 100 minus the annual % yield and settlement of the options contracts is at the end of March 20X5. The current basis on the March futures price is 44 points; and it is expected to be 33 points on 1 January 20X5, 22 points on 1 February 20X5 and 11 points on 1 March 20X5.
Rozu Bank has offered Kurshi co a swap on a counterparty variable rate of SOFR plus 30 basis points or a fixed rate of 4.6%, where Kurshi co receives 70% of any benefits accruing from undertaking the swap, prior to any bank charges. Rozu Bank will charge Kurshi co 10 basis points for the swap.
Kurshi co's chief executive officer believes that a centralised treasury department is necessary in order to increase shareholder value, but Kurshi co's new chief financial officer (CFO) thinks that having decentralised treasury departments operating across the subsidiary companies could be more beneficial. The CFO thinks that this is particularly relevant to the situation which Suisen Co, a company owned by Kurshi co, is facing.
Suisen Co-operates in a country where most companies conduct business activities based on Islamic finance principles. It produces confectionery products including chocolates. It wants to use Salam contracts instead of commodity futures contracts to hedge its exposure to price fluctuations of cocoa. Salam contracts involve a commodity which is sold based on currently agreed prices, quantity and quality. Full payment is received by the seller immediately, for an agreed delivery to be made in the future.

Required:

(a) Based on the two hedging choices Kurshi co is considering, recommend a hedging strategy for the $18,000,000 borrowing. Support your answer with appropriate calculations and discussion.

(17 marks)

(b) Discuss how a centralised treasury department may increase value for Kurshi co and the possible reasons for decentralising the treasury department. **(8 marks)**

QN.NO:3

Foreign NPV Puxty plc is a specialist manufacturer of window frames. Its main UK manufacturing operation is based in the south of England, from where it distributes its products throughout the UK.

The directors are now considering whether they should open up an additional manufacturing operation in France – which they believe there will be a good market for their products.

A suitable factory has been located just outside Paris that could be rented on a 5-year lease at an annual charge of €3.8m, payable each year in advance. The manufacturing equipment would cost €75m, of which €60m would have to be paid at the start of the project, with the balance payable 12 months later.

At the start of each year the French factory would require working capital equal to 40% of that year's sales revenues. It is expected that the factory will be able to produce and sell 80,000 window units per year although, in the first year, because of the need to 'run in' the machinery and its new workforce, output is only expected to be 50,000 window units. Each window is likely to be sold for €750, a price that represents a 150% markup on cash production costs.

The French factory would be set up as a wholly-owned subsidiary of Puxty plc. In France, 25% straight-line depreciation on cost is an allowable expense against company tax. Corporation tax is payable at 40% at each year-end without delay and any unused losses can be brought forward for set off against the following year's profits. No UK tax would be payable on the after-tax French profits.

All amounts in € are given in current terms. Annual inflation in France is expected to run at 6% per year in the foreseeable future. All € cash flows involved are expected to increase in line with this inflation rate, with the exception of the factory rental and the cost of the manufacturing equipment, both of which would remain unchanged.

The French factory would be producing windows to a special design patented by Puxty. To protect its patent rights, Puxty plc will charge its French subsidiary a fixed royalty of £20 per window. This cost would be allowable against the subsidiary's French tax liability.

The current €…/£1 spot rate is 1.5. Inflation in the UK is expected to be 4% per year over the period. There are no remittance restrictions between France and the UK. Exchange rates for the coming years are forecasted as follows:-

Yr 1	2	3	4	5
1.53	1.56	1.59	1.62	1.65

Puxty plc is an all-equity financed company that is quoted on the London Stock Exchange. Its shares have a beta value of 1.25. The current annual return on UK Government Treasury Bills is 10% and the expected return on the market is 18%. In the UK Corporation Tax is payable at 35%, one year in arrears.

Puxty operates on a 5-year planning horizon. At the end of five years, assume that working capital would be fully recovered and the production equipment would have a scrap value, at that time, of €70m before tax. Proceeds on asset sales are taxed at 40%. Assume all cash flows arise at the end of the year to which they relate, unless otherwise stated.

Required:

a. Evaluate the proposed investment in France and recommend what investment decision should be made by Puxty plc. **(20 marks)**

State clearly any assumptions you make and work all calculations rounded to nearest 10,000 (either € or £) – i.e. €0.01 m or £0.01m.

b. Discuss the key differences between a Salam contract, under Islamic finance principles, and futures contracts. **(5 marks)**

****